

IN THE CLAIMS

1. (previously presented) A digital signal receiver, comprising:

a reception processor operable to receive a broadcast signal that includes repeating data and to use a browser to cause the repeating data to be displayed by a display unit; and

a distributed information storage unit operable to obtain the repeating data from said reception processor, to separate one period of data from the repeating data, and to store the one period of data in a data storage device;

said distributed information storage unit being further operable to read the one period of data from the data storage device in response to a received command, to restore the repeating data using the one period of data, to generate a menu frame of items associated with the one period of data, to convert the menu frame into menu data having a format that can be used by the browser, and to deliver at least one of the repeating data and the menu data to said reception processor.

2. (previously presented) The digital signal receiver as claimed in claim 1, wherein said distributed information storage unit includes the data storage device.

3. (previously presented) The digital signal receiver as claimed in claim 1, wherein said distributed information storage unit is operable to select items for inclusion in the menu frame based on preferences associated with a given user.

4. (previously presented) The digital signal receiver as claimed in claim 1, wherein said distributed information storage unit is operable to arrange items included in the menu frame based on priorities associated with a given user.

5. (previously presented) The digital signal receiver as claimed in claim 1, wherein said reception processor

is further operable to encrypt the repeating data before the repeating data is obtained by said distributed information storage unit, and said distributed information storage unit is further operable to decrypt the encrypted data to obtain the repeating data from said reception processor.

6. (previously presented) The digital signal receiver as claimed in claim 1, wherein said distributed information storage unit is further operable to encrypt the at least one of the repeating data and the menu data before the at least one of the repeating data and the menu data is supplied to said reception processor, and said reception processor is further operable to decrypt the encrypted data supplied by said distributed information storage unit.

7. (previously presented) The digital signal receiver as claimed in claim 1, wherein the broadcast signal is transmitted during a vacant broadcast time.

8. (previously presented) A digital signal display method, comprising:

- receiving a broadcast signal that includes repeating data;

- separating one period of data from the repeating data;

- storing the one period of data;

- reading out the one period of stored data in response to a command;

- restoring the repeating data using the one period of stored data;

- generating a menu frame of items associated with the one period of data;

- converting the menu frame into menu data having a format that can be used by a browser; and

- using the browser to display at least one of the repeating data and the menu data on a display unit.

9. (previously presented) The method as claimed in claim 8, wherein said receiving step is carried out by a first unit, said separating step is carried out by a second unit, and said method further comprises: encrypting the repeating data after said receiving step, sending the encrypted data from the first unit to the second unit, and decrypting the encrypted data before said separating step.

10. (previously presented) The method as claimed in claim 8, wherein said converting step is carried out by a first unit, said step of using the browser is carried out by a second unit, and said method further comprises: encrypting the at least one of the repeating data and the menu data, sending the encrypted data from the first unit to the second unit, and decrypting the encrypted data before said step of using the browser.

11. (cancelled)

12. (previously presented) The digital signal receiver as claimed in claim 1, wherein said distributed information storage unit is further operable to encrypt the one period of data before the one period of data is stored in the data storage device, to read the encrypted data from the data storage device in response to the received command, and to decrypt the encrypted data to obtain the one period of data.

13. (previously presented) The digital signal receiver as claimed in claim 1, wherein the repeating data includes charge-based data, and said distributed information storage unit is further operable to accumulate billing data in a watch record whenever the one period of data is read from the data storage device.

14. (previously presented) The digital signal receiver as claimed in claim 13, wherein said distributed information storage unit is further operable to periodically

send the billing data to said reception processor for transmission to a management center.

15. (previously presented) The method as claimed in claim 8, wherein said storing step includes encrypting the one period of data and storing the encrypted data, and said reading out step includes reading out the encrypted data in response to the received command and decrypting the encrypted data to obtain the one period of data.

16. (previously presented) The method as claimed in claim 8, wherein the repeating data includes charge-based data, and said method further comprises: accumulating billing data in a watch record whenever said step of reading out the one period of stored data is carried out.

17. (previously presented) The method as claimed in claim 16, further comprising: periodically transmitting the billing data to a management center.